

REGION VIII
DATA VALIDATION REPORT
ORGANICS

Case/TDD No.	Site Name		Operable Unit
38043 / 0811-02	5600 South 900 East Plume		
RPM/OSC Name			
Gwen Christiansen			
Contractor Laboratory	Contract No.	SDG No.	Laboratory DPO/Region
A4 Scientific, Inc.	EPW05036	H1YQ0	8

Review Assigned Date: January 9, 2009 Data Validator: Kent Alexander
 Review Completion Date: January 30, 2009 Report Reviewer: Kim Ohlson

Sample ID	Matrix	Analysis
H1YQ0	Water	CLP – Volatile Analyses by SOM01.2
H1YQ1		
H1YQ2		
H1YQ3		
H1YQ4		
H1YQ5		
H1YQ6		
H1YQ7		
H1YQ8		
H2560		
H2561		
H29Q8		

DATA QUALITY STATEMENT

- () Data are ACCEPTABLE according to EPA Functional Guidelines with no qualifiers (flags) added by the reviewer.
- () Data are UNACCEPTABLE according to EPA Functional Guidelines.
- (X) Data are acceptable with QUALIFICATIONS noted in review.

PO Attention Required? Yes _____ No ___ X ___ If yes, list the items that require attention:

ORGANIC DATA VALIDATION REPORT**REVIEW NARRATIVE SUMMARY**

This data package was reviewed according to the EPA document "USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review," June 2008.

Raw data were reviewed for completeness and transcription accuracy onto the summary forms. Approximately 10-20% of the results reported in each of the samples, calibrations, and QC analyses were recalculated and verified. If problems were identified during the recalculation of results, a more thorough calculation check was performed.

The data package, SDG No. H1YQ0, consisted of 12 water samples for CLP low volatile organic analyses by SOM01.2.

The following tables list data qualifiers added to the data. (Please see Data Qualifier Definitions, attached to the end of this report.)

Sample Number	Volatile Compound	Qualifier	Reason For Qualification	Review Section
H1YQ4, H1YQ5, H1YQ7, H2561	Bromomethane	UJ	Continuing calibration %D > 25%	4
H1YQ6	Vinyl chloride	J/UJ	DMC percent recovery below QC limits	5
H1YQ6, H1YQ7, H1YQ8	Dichlorodifluoromethane Chloromethane Bromomethane Chloroethane Carbon disulfide			
H1YQ4	Acetone 2-Butanone			
H1YQ0, H1YQ1, H1YQ2, H1YQ6	Cyclohexane Methylcyclohexane 1,2-Dichloropropane Bromodichloromethane			
H1YQ3, H2560, H2561	Trichloroethene Toluene Tetrachloroethene Ethylbenzene o-Xylene m,p-Xylene Styrene Isopropylbenzene	J Detects	DMC percent recovery above QC limits	
H1YQ0, H1YQ1, H1YQ2, H1YQ3, H1YQ4, H1YQ5, H1YQ7DL, H2561, H2561DL	Methylene Chloride	U	Blank contamination	8

Sample Number	Volatile Compound	Qualifier	Reason For Qualification	Review Section
H1YQ7	1,2-Dichloropropane Cyclohexane 1,1,2-Trichloroethane	U	Compound Identification	9
H2561	Acetone Cyclohexane			
H29Q8	Acetone			

1. DELIVERABLES

All deliverables were present as specified in the subcontract.

VOA: Yes X No _____

Comments: None.

2. HOLDING TIMES AND PRESERVATION CRITERIA

All holding times and preservation criteria were met.

VOA: Yes X No _____

Comments: The preserved water samples were analyzed within 14 days from sample collection.

According to the Chain-of-Custody records and case narrative, the sample cooler was received within the temperature range of $4 \pm 2^{\circ}\text{C}$. Chain-of-custody, summary forms, and raw data were evaluated.

3. BFB PERFORMANCE RESULTS

The bromofluorobenzene (BFB) performance results were within the specified control limits. All appropriate BFB results were included.

VOA: Yes X No _____

Comments: BFB instrument performance checks were run for each 12 hours of analysis. Ion abundance criteria were met and were verified from raw data.

4. INSTRUMENT CALIBRATIONS: INITIAL AND CONTINUING STANDARDS

Initial instrument calibrations were performed according to method requirements and met the project specified control limits.

VOA: Yes _____ No X

Comments: Initial calibration standards containing both target compounds and the deuterated monitoring compounds (DMCs) were analyzed at the correct frequency. The average relative response factors (RRFs) for the compounds identified by the Functional Guidelines as poor responders were greater than or equal to 0.01 (0.005 for 1,4-dioxane). The RRFs for all other target compounds were greater than or equal to 0.05. The percent relative standard deviations (%RSDs) of the RRFs were less than or equal to 50% for 1,4-dioxane, 40% for the poor responders and less than or equal to 20% for all other analytes with the exceptions noted below. Summary forms and raw data were evaluated.

The following table lists the percent relative standard deviations (%RSDs) that were greater than criteria and the qualifiers added to the data:

Compound	%RSD	RRFs	Associated Samples	Qualifiers
Bromomethane	39.3%	--	H1YQ0 H1YQ1 H1YQ2 H1YQ3 H1YQ6 H1YQ8 H2560 H29Q8	None
Chloromethane	20.7%	--	H1YQ4	
Bromomethane	26.2%	--	H1YQ5	
1,2,3-Trichlorobenzene	20.3%	--	H1YQ7 H2561	None

None of the above listed compounds were detected in the associated samples. The %RSD was high for Chloroethane-d5, no action is taken on DMCs.

Continuing instrument calibrations were performed according to method requirements and met project specified control limits.

VOA: Yes No X

Comments: Continuing calibration standards containing both target compounds and the DMCs were analyzed at the beginning and end of each 12-hour analysis period. The RRFs for the compounds identified by the Functional Guidelines as poor responders were greater than or equal to 0.01 (0.005 for 1,4-dioxane). The RRFs for all other target compounds were greater than or equal to 0.05. The opening standard percent differences (%Ds) of the RRFs were less than or equal to 50% for 1,4-dioxane, 40% for the poor responders and less than or equal to 25% for all other analytes with the following exceptions. All %Ds for the closing standards were less than 50% and all RRFs were greater than 0.01 (0.005 for 1,4-dioxane). Summary forms and raw data were evaluated.

The following table lists the %Ds in the opening standards that were greater than criteria and qualifiers added to the data:

Compound	RRFs	%D	Associated Samples	Qualifiers
Bromomethane	--	26.7%	H1YQ4 H1YQ5 H1YQ7 H2561	UJ

5. DEUTERATED MONITORING COMPOUNDS

Deuterated monitoring compound (DMC) recovery analysis was performed according to method requirements and results met specified control limits.

VOA: Yes No X

Comments: DMCs were added to all samples and blanks. Summary forms and raw data were evaluated. The following table lists the samples with DMC percent recoveries (%Rs) outside control limits and the qualifiers added to the data:

Sample Number	DMC	%R	QC Limits	Compounds	Qualifier
H1YQ6	Vinyl chloride-d3	53%	65-131%	Vinyl chloride	J/UJ
H1YQ6 H1YQ7 H1YQ8	Chloroethane-5	54% 66% 69%	71-131%	Dichlorodifluoromethane Chloromethane Bromomethane Chloroethane Carbon disulfide	
H1YQ4	2-Butanone-d5	47%	49-155%	Acetone 2-Butanone	
H1YQ0 H1YQ1 H1YQ2 H1YQ6	1,2-Dichloropropane-d6	75% 72% 73% 76%	79-124%	Cyclohexane Methylcyclohexane 1,2-Dichloropropane Bromodichloromethane	
H1YQ3 H2560 H2561	Toluene-d8	131% 126% 125%	77-121%	Trichloroethene Toluene Tetrachloroethene Ethylbenzene o-Xylene m,p-Xylene Styrene Isopropylbenzene	J Detects

The recoveries for 1,2-Dichloropropane-d6 in the MS/MSD analyses exceeded QC limits. No action was required for these analyses because no qualification is taken on QC samples (i.e., blanks and MS/MSD).

6. MATRIX SPIKE/MATRIX SPIKE DUPLICATE

Matrix Spike/Matrix Spike Duplicate (MS/MSD) analyses were performed according to method requirements and results met recommended recovery and precision limits.

VOA: Yes X No

Comments: Matrix spike/matrix spike duplicate (MS/MSD) analyses were performed on sample H1YQ0. The percent recoveries and the relative percent differences (RPDs) were within the QC limits. Summary forms and raw data were evaluated.

7. INTERNAL STANDARD AREA

Internal standard area analysis was performed according to method requirements and results met specified control limits.

VOA: Yes X No _____

Comments: Internal standard area counts did not vary by more than a factor of two from the associated 12-hour calibration standard. The internal standard retention times did not vary more than \pm 30 seconds from the retention time of the associated 12-hour calibration standards. Summary forms and raw data were evaluated.

8. LABORATORY BLANK ANALYSIS RESULTS

The laboratory blank analysis was performed according to method requirements and results met specified limits.

VOA: Yes _____ No X

Comments: Method blank analyses were performed after the calibration standards and once for every 12-hour time period. A storage blank (VHBLKS1) was also analyzed. Summary forms and raw data were evaluated.

Contamination was detected in both method blanks and the storage blank as summarized in the following table. Quantitation limits in the associated samples were raised in accordance with the rules set forth in the "USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review," June 2008.

Blank ID	Contaminant	Concentration Found in Blank (ug/L)	Associated Samples	Concentration Found in Sample (ug/L)	Qualifier/ Adjustment
VBLKTF	Methylene chloride	2.0	H1YQ0	1.8	
VBLKTI		2.2	H1YQ1	1.2	
VHBLK01		2.3	H1YQ2 H1YQ3 H1YQ4 H1YQ5 H2561	1.7 2.0 3.0 3.3 3.7	10 U
			H1YQ7DL H2561DL	140 130	500 U

There was also a TIC detected in the blank at a RT of 13.47 minutes. Two samples (H1YQ2 and H1YQ8) also had a TIC at that RT and were subsequently qualified as not detected.

9. SAMPLE RESULTS

The sample results were reviewed and all compound identifications were acceptable and met contract requirements.

VOA: Yes No X

Comments: The Sample relative retention times (RRTs) were within ± 0.06 RRT units of the standard RRT. Relative intensities of ions agreed within $\pm 20\%$ between standard and sample spectra. All samples results and CRQL were correctly calculated. There were several mass spectrum identifications that did not meet the criteria of a relative intensity greater than 10% were present in the sample spectrum.

Sample H1YQ7 had the result values for 1,2-dichloropropane, cyclohexane, and 1,1,2-trichloroethane qualified with a "U". Sample H2561 had the results values for acetone and cyclohexane qualified with a "U". Sample H29Q8 had the result for acetone qualified with a "U". The reviewer determined the mass spectrum of the sample did not match that of the reference standard.

Tentatively identified compounds (TICs) were qualitatively assessed by a mass spectral library search.

10. Additional Comments or Problems/Resolutions Not Addressed Above

VOA: Yes No X

Comments: None.

ORGANIC DATA QUALITY ASSURANCE REVIEW**Region VIII****DATA QUALIFIER DEFINITIONS**

For the purpose of Data Validation, the following code letters and associated definitions are provided for use by the data validator to summarize the data quality.

GENERAL QUALIFIERS for use with both INORGANIC and ORGANIC DATA

- R - Reported value is "rejected." Resampling or reanalysis may be necessary to verify the presence or absence of the compound.
- J - The associated numerical value is an estimated quantity because the Quality Control criteria were not met.
- U J - The reported quantitation limit is estimated because Quality Control criteria were not met. Element or compound was not detected.
- N J - Estimated value of a tentatively identified compound. (Identified with a CAS number.)
ORGANICS analysis only.
- U - The material was analyzed for, but was not detected above the level of the associated value. The associated value is either the sample quantitation limit or the sample detection limit.

1A - FORM I VCA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

H1YQ0

Lab Name: A4 SCIENTIFIC, INC. Contract: EPW05036
 Lab Code: A4 Case No.: 38043 Mod. Ref No.: SDG No.: H1YQ0
 Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: 0009799-01
 Sample wt/vol: 5.00 (g/mL) mL Lab File ID: H4778.D
 Level: (TRACE/LOW/MED) LOW Date Received: 12/09/2008
 % Moisture: not dec. Date Analyzed: 12/15/2008
 GC Column: DB-624 ID: 0.20 (mm) Dilution Factor: 1.0
 Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)
 Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg)ug/L	Q
75-71-8	Dichlorodifluoromethane	5.0	U
74-37-3	Chloromethane	5.0	U
75-01-4	Vinyl chloride	5.0	U
74-83-9	Bromomethane	5.0	U
75-00-3	Chloroethane	5.0	U
75-69-4	Trichlorofluoromethane	5.0	U
75-35-4	1,1-Dichloroethene	5.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	5.0	U
67-64-1	Acetone	10	U
75-15-0	Carbon disulfide	5.0	U
79-20-9	Methyl acetate	5.0	U
75-09-2	Methylene chloride	1.8	JB
156-60-5	trans-1,2-Dichloroethene	5.0	U
1634-04-4	Methyl tert-butyl ether	5.0	U
75-34-3	1,1-Dichloroethane	5.0	U
156-59-2	cis-1,2-Dichloroethene	5.0	U
78-93-3	2-Butanone	10	U
74-97-5	Bromochloromethane	5.0	U
67-66-3	Chloroform	5.0	U
71-55-6	1,1,1-Trichloroethane	5.0	U
110-82-7	Cyclohexane	5.0	U
56-23-5	Carbon tetrachloride	5.0	U
71-43-2	Benzene	5.0	U
107-06-2	1,2-Dichloroethane	5.0	U
123-91-1	1,4-Dioxane	100	U

Report 1,4-Dioxane for Low-Medium VOA analysis only

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1-30-09

1B - FORM I VOA-2
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

H1YQ0

Lab Name: A4 SCIENTIFIC, INC. Contract: EPW05036
 Lab Code: A4 Case No.: 38043 Mod. Ref No.: SDG No.: H1YQ0
 Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: 0009799-01
 Sample wt/vol: 5.00 (g/mL) mL Lab File ID: H4778.D
 Level: (TRACE/LOW/MED) LOW Date Received: 12/09/2008
 % Moisture: not dec. Date Analyzed: 12/15/2008
 GC Column: DB-624 ID: 0.20 (mm) Dilution Factor: 1.0
 Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)
 Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
79-01-6	Trichloroethene	5.0	U
108-87-2	Methylcyclohexane	5.0	U
78-87-5	1,2-Dichloropropane	5.0	U
75-27-4	Bromodichloromethane	5.0	U
10061-01-5	cis-1,3-Dichloropropene	5.0	U
108-10-1	4-Methyl-2-pentanone	10	U
108-88-3	Toluene	5.0	U
10061-02-6	trans-1,3-Dichloropropene	5.0	U
79-00-5	1,1,2-Trichloroethane	5.0	U
127-18-4	Tetrachloroethene	5.0	U
591-78-6	2-Hexanone	10	U
124-48-1	Dibromochloromethane	5.0	U
106-93-4	1,2-Dibromoethane	5.0	U
108-90-7	Chlorobenzene	5.0	U
100-41-4	Ethylbenzene	5.0	U
95-47-6	o-Xylene	5.0	U
179601-23-1	m,p-Xylene	5.0	U
100-42-5	Styrene	5.0	U
75-25-2	Bromoform	5.0	U
98-82-8	Isopropylbenzene	5.0	U
79-34-5	1,1,2,2-Tetrachloroethane	5.0	U
541-73-1	1,3-Dichlorobenzene	5.0	U
106-46-7	1,4-Dichlorobenzene	5.0	U
95-50-1	1,2-Dichlorobenzene	5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	5.0	U
120-82-1	1,2,4-Trichlorobenzene	5.0	U
87-61-6	1,2,3-Trichlorobenzene	5.0	U

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1-30-09

1J - FORM I VOA-TIC
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

H1YQ0

Lab Name:	A4 SCIENTIFIC, INC.			Contract:	EPW05036	
Lab Code:	A4	Case No.:	38043	Mod. Ref No.:	SDG No.:	
Matrix:	(SOIL/SED/WATER)	WATER		Lab Sample ID:	0009799-01	
Sample wt/vol:	5.00	(g/mL)	mL	Lab File ID:	H4778.D	
Level:	(TRACE or LOW/MED)	LOW		Date Received:	12/09/2008	
% Moisture:	not dec.			Date Analyzed:	12/15/2008	
GC Column:	DB-624	ID:	0.20	(mm)	Dilution Factor:	1.0
Soil Extract Volume:		(uL)		Soil Aliquot Volume:	(uL)	
CONCENTRATION UNITS: (ug/L or ug/kg)			ug/L	Purge Volume:	5.0 (mL)	

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01	000556-67-2	Cyclotetrasiloxane, octamet.	11.38	11	JN
02					
03					
04					
05					
06					
07					
08					
09					
10					
11					
12					
13					
14					
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16					
17					
18					
19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					
	E966796 ¹	Total Alkanes	N/A		

¹EPA-designated Registry Number.

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1-20-09

1A - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

H1YQ1

Lab Name: A4 SCIENTIFIC, INC. Contract: EPW05036

Lab Code: A4 Case No.: 38043 Mod. Ref No.: SDG No.: H1YQ0

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: 0009799-02

Sample wt/vol: 5.00 (g/mL) mL Lab File ID: H4781.D

Level: (TRACE/LOW/MED) LOW Date Received: 12/09/2008

% Moisture: not dec. Date Analyzed: 12/15/2008

GC Column: DB-624 ID: 0.20 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
75-71-8	Dichlorodifluoromethane	5.0	U
74-87-3	Chloromethane	5.0	U
75-01-4	Vinyl chloride	5.0	U
74-83-9	Bromomethane	5.0	U
75-00-3	Chloroethane	5.0	U
75-69-4	Trichlorodifluoromethane	5.0	U
75-35-4	1,1-Dichloroethene	5.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	5.0	U
67-64-1	Acetone	10	U
75-15-0	Carbon disulfide	5.0	U
79-20-9	Methyl acetate	5.0	U
75-09-2	Methylene chloride	1.2	JB
156-60-5	trans-1,2-Dichloroethene	5.0	U
1634-04-4	Methyl tert-butyl ether	5.0	U
75-34-3	1,1-Dichloroethane	5.0	U
156-59-2	cis-1,2-Dichloroethene	5.0	U
78-93-3	2-Butanone	10	U
74-97-5	Bromochloromethane	5.0	U
67-66-3	Chloroform	5.0	U
71-55-6	1,1,1-Trichloroethane	5.0	U
110-82-7	Cyclohexane	5.0	U
56-23-5	Carbon tetrachloride	5.0	U
71-43-2	Benzene	5.0	U
107-06-2	1,2-Dichloroethane	5.0	U
123-91-1	1,4-Dioxane	100	U

Report 1,4-Dioxane for Low-Medium VOA analysis only

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1-30-09

1B - FORM I VOA-2
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

H1YQ1

Lab Name: A4 SCIENTIFIC, INC. Contract: EPW05036

Lab Code: A4 Case No.: 38043 Mod. Ref No.: SDG No.: H1YQ0

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: 0009799-02

Sample wt/vol: 5.00 (g/mL) mL Lab File ID: H4781.D

Level: (TRACE/LOW/MED) LOW Date Received: 12/09/2008

% Moisture: not dec. Date Analyzed: 12/15/2008

GC Column: DB-624 ID: 0.20 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
79-01-6	Trichloroethene	5.0	U
108-87-2	Methylcyclohexane	5.0	U
78-87-5	1,2-Dichloropropane	5.0	U
75-27-4	Bromodichloromethane	5.0	U
10061-01-5	cis-1,3-Dichloropropene	5.0	U
108-10-1	4-Methyl-2-pentanone	10	U
108-88-3	Toluene	5.0	U
10061-02-6	trans-1,3-Dichloropropene	5.0	U
79-00-5	1,1,2-Trichloroethane	5.0	U
127-18-4	Tetrachloroethene	15	
591-78-6	2-Hexanone	10	U
124-48-1	Dibromochloromethane	5.0	U
106-93-4	1,2-Dibromoethane	5.0	U
108-90-7	Chlorobenzene	5.0	U
100-41-4	Ethylbenzene	5.0	U
95-47-6	o-Xylene	5.0	U
179601-23-1	m,p-Xylene	5.0	U
100-42-5	Styrene	5.0	U
75-25-2	Bromoform	5.0	U
98-82-8	Isopropylbenzene	5.0	U
79-34-5	1,1,2,2-Tetrachloroethane	5.0	U
541-73-1	1,3-Dichlorobenzene	5.0	U
106-46-7	1,4-Dichlorobenzene	5.0	U
95-50-1	1,2-Dichlorobenzene	5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	5.0	U
120-82-1	1,2,4-Trichlorobenzene	5.0	U
87-61-6	1,2,3-Trichlorobenzene	5.0	U

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1-30-09

1J - FORM I VOA-TIC
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

H1YQ1

Lab Name:	A4 SCIENTIFIC, INC.			Contract:	EPW05036
Lab Code:	A4	Case No.:	38043	Mod. Ref No.:	SDG No.: H1YQ0
Matrix:	(SOIL/SED/WATER)	WATER		Lab Sample ID:	0009799-02
Sample wt/vol:	5.00	(g/mL)	mL	Lab File ID:	H4781.D
Level:	(TRACE or LOW/MED)	LOW		Date Received:	12/09/2008
% Moisture:	not dec.			Date Analyzed:	12/15/2008
GC Column:	DB-624	ID:	0.20 (mm)	Dilution Factor:	1.0
Soil Extract Volume:		(uL)	Soil Aliquot Volume:		(uL)
CONCENTRATION UNITS: (ug/L or ug/kg) ug/L			Purge Volume:	5.0	(mL)

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01	UNKNOWN	7.64	7.2	J
02 000556-67-2	Cyclotetrasiloxane, octamet.	11.38	15	JN
03 005779-95-3	Benzaldehyde, 3,5-dimethyl-	14.82	6.2	JN
04				
05				
06				
07				
08				
09				
10				
11				
12				
13				
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20				
21				
22				
23				
24				
25				
26				
27				
28				
29				
30				
E966796 ¹	Total Alkanes	N/A		

¹EPA-designated Registry Number.

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1A - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

H1YQ2

Lab Name: A4 SCIENTIFIC, INC. Contract: EPW05036
 Lab Code: A4 Case No.: 38043 Mod. Ref No.: SDG No.: H1YQ0
 Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: 0009799-03
 Sample wt/vol: 5.00 (g/mL) mL Lab File ID: H4783.D
 Level: (TRACE/LOW/MED) LOW Date Received: 12/09/2008
 % Moisture: not dec. Date Analyzed: 12/15/2008
 GC Column: DB-624 ID: 0.20 (mm) Dilution Factor: 1.0
 Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)
 Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
75-71-8	Dichlorodifluoromethane	5.0	U
74-87-3	Chloromethane	5.0	U
75-01-4	Vinyl chloride	5.0	U
74-83-9	Bromomethane	5.0	U
75-00-3	Chloroethane	5.0	U
75-69-4	Trichlorofluoromethane	5.0	U
75-35-4	1,1-Dichloroethene	5.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	5.0	U
67-64-1	Acetone	10	U
75-15-0	Carbon disulfide	5.0	U
79-20-9	Methyl acetate	5.0	U
75-09-2	Methylene chloride	1.7	JB
156-60-5	trans-1,2-Dichloroethene	5.0	U
1634-04-4	Methyl tert-butyl ether	5.0	U
75-34-3	1,1-Dichloroethane	5.0	U
156-59-2	cis-1,2-Dichloroethene	5.0	U
78-93-3	2-Butanone	10	U
74-97-5	Bromochloromethane	5.0	U
67-66-3	Chloroform	5.0	U
71-55-6	1,1,1-Trichloroethane	5.0	U
110-82-7	Cyclohexane	5.0	U
56-23-5	Carbon tetrachloride	5.0	U
71-43-2	Benzene	5.0	U
107-06-2	1,2-Dichloroethane	5.0	U
123-91-1	1,4-Dioxane	100	U

Report 1,4-Dioxane for Low-Medium VOA analysis only

KSA
130-09

1B - FORM I VOA-2
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

H1YQ2

Lab Name: A4 SCIENTIFIC, INC. Contract: EPW05036
 Lab Code: A4 Case No.: 38043 Mod. Ref No.: SDG No.: H1YQ0
 Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: 0009799-03
 Sample wt/vol: 5.00 (g/mL) mL Lab File ID: H4783.D
 Level: (TRACE/LOW/MED) LOW Date Received: 12/09/2008
 % Moisture: not dec. Date Analyzed: 12/15/2008
 GC Column: DB-624 ID: 0.20 (mm) Dilution Factor: 1.0
 Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)
 Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg)ug/L	Q
79-01-6	Trichloroethene	8.3	
108-87-2	Methylcyclohexane	5.0	U
78-87-5	1,2-Dichloropropane	5.0	U
75-27-4	Bromodichloromethane	5.0	U
10061-01-5	cis-1,3-Dichloropropene	5.0	U
108-10-1	4-Methyl-2-pentanone	10	U
108-88-3	Toluene	5.0	U
10061-02-6	trans-1,3-Dichloropropene	5.0	U
79-00-5	1,1,2-Trichloroethane	5.0	U
127-18-4	Tetrachloroethene	71	
591-78-6	2-Hexanone	10	U
124-48-1	Dibromochloromethane	5.0	U
106-93-4	1,2-Dibromoethane	5.0	U
108-90-7	Chlorobenzene	5.0	U
100-41-4	Ethylbenzene	5.0	U
95-47-6	o-Xylene	5.0	U
179601-23-1	m,p-Xylene	5.0	U
100-42-5	Styrene	5.0	U
75-25-2	Bromoform	5.0	U
98-82-8	Isopropylbenzene	5.0	U
79-34-5	1,1,2,2-Tetrachloroethane	5.0	U
541-73-1	1,3-Dichlorobenzene	5.0	U
106-46-7	1,4-Dichlorobenzene	5.0	U
95-50-1	1,2-Dichlorobenzene	5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	5.0	U
120-82-1	1,2,4-Trichlorobenzene	5.0	U
87-61-6	1,2,3-Trichlorobenzene	5.0	U

US
↓

KSA
1-30-09

1J - FORM I VOA-TIC
 VOLATILE ORGANICS ANALYSIS DATA SHEET
 TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

H1YQ2

Lab Name: A4 SCIENTIFIC, INC. Contract: EPW05036
 Lab Code: A4 Case No.: 38043 Mod. Ref No.: SDG No.: H1YQ0
 Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: 0009799-03
 Sample wt/vol: 5.00 (g/mL) mL Lab File ID: H4783.D
 Level: (TRACE or LOW/MED) LOW Date Received: 12/09/2008
 % Moisture: not dec. Date Analyzed: 12/15/2008
 GC Column: DB-624 ID: 0.20 (mm) Dilution Factor: 1.0
 Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)
 CONCENTRATION UNITS: (ug/L or ug/kg) ug/L Purge Volume: 5.0 (mL)

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01 000556-67-2	Cyclotetrasiloxane, octamet.	11.38	28	JN
02	UNKNOWN	13.47	6.1	J
03 005973-71-7	Benzaldehyde, 3,4-dimethyl-	14.82	5.1	JN
04				
05				
06				
07				
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09				
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23				
24				
25				
26				
27				
28				
29				
30				
E966796 ¹	Total Alkanes	N/A		

¹EPA-designated Registry Number.

V-A
1-30-08

1A - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

H1YQ3

Lab Name:	A4 SCIENTIFIC, INC.	Contract:	EPW05036			
Lab Code:	A4	Case No.:	38043	Mod. Ref No.:	SDG No.:	H1YQ0
Matrix:	(SOIL/SED/WATER)	WATER		Lab Sample ID:	0009799-04	
Sample wt/vol:	5.00	(g/mL)	mL	Lab File ID:	H4788.D	
Level:	(TRACE/LOW/MED)	LOW		Date Received:	12/09/2008	
% Moisture:	not dec.			Date Analyzed:	12/15/2008	
GC Column:	DB-624	ID:	0.20 (mm)	Dilution Factor:	1.0	
Soil Extract Volume:			(uL)	Soil Aliquot Volume:	(uL)	
Purge Volume:		5.0	(mL)			

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
75-71-8	Dichlorodifluoromethane	5.0	U
74-87-3	Chloromethane	5.0	U
75-01-4	Vinyl chloride	5.0	U
74-83-9	Bromomethane	5.0	U
75-00-3	Chloroethane	5.0	U
75-69-4	Trichlorofluoromethane	5.0	U
75-35-4	1,1-Dichloroethene	5.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	5.0	U
67-64-1	Acetone	10	U
75-15-0	Carbon disulfide	5.0	U
79-20-9	Methyl acetate	5.0	U
75-09-2	Methylene chloride	2.0	JB
156-60-5	trans-1,2-Dichloroethene	5.0	U
1634-04-4	Methyl tert-butyl ether	5.0	U
75-34-3	1,1-Dichloroethane	5.0	U
156-59-2	cis-1,2-Dichloroethene	5.0	U
78-93-3	2-Butanone	10	U
74-97-5	Bromochloromethane	5.0	U
67-66-3	Chloroform	5.0	U
71-55-6	1,1,1-Trichloroethane	5.0	U
110-82-7	Cyclohexane	5.0	U
56-23-5	Carbon tetrachloride	5.0	U
71-43-2	Benzene	5.0	U
107-06-2	1,2-Dichloroethane	5.0	U
123-91-1	1,4-Dioxane	100	U

Report 1,4-Dioxane for Low-Medium VOA analysis only

128-A
1-30-09

1B - FORM I VOA-2
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

H1YQ3

Lab Name: A4 SCIENTIFIC, INC. Contract: EPW05036
 Lab Code: A4 Case No.: 38043 Mod. Ref No.: SDG No.: H1YQ0
 Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: 0009799-04
 Sample wt/vol: 5.00 (g/mL) mL Lab File ID: H4788.D
 Level: (TRACE/LOW/MED) LOW Date Received: 12/09/2008
 % Moisture: not dec. Date Analyzed: 12/15/2008
 GC Column: DB-624 ID: 0.20 (mm) Dilution Factor: 1.0
 Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)
 Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
79-01-6	Trichloroethene	5.0	U
108-87-2	Methylcyclohexane	5.0	U
78-87-5	1,2-Dichloropropane	5.0	U
75-27-4	Bromodichloromethane	5.0	U
10061-01-5	cis-1,3-Dichloropropene	5.0	U
108-10-1	4-Methyl-2-pentanone	10	U
108-88-3	Toluene	5.0	U
10061-02-6	trans-1,3-Dichloropropene	5.0	U
79-00-5	1,1,2-Trichloroethane	5.0	U
127-18-4	Tetrachloroethene	3.7	J
591-78-6	2-Hexanone	10	U
124-48-1	Dibromochloromethane	5.0	U
106-93-4	1,2-Dibromoethane	5.0	U
108-90-7	Chlorobenzene	5.0	U
100-41-4	Ethylbenzene	5.0	U
95-47-6	o-Xylene	5.0	U
179601-23-1	m, p-Xylene	5.0	U
100-42-5	Styrene	5.0	U
75-25-2	Bromoform	5.0	U
98-82-8	Isopropylbenzene	5.0	U
79-34-5	1,1,2,2-Tetrachloroethane	5.0	U
541-73-1	1,3-Dichlorobenzene	5.0	U
106-46-7	1,4-Dichlorobenzene	5.0	U
95-50-1	1,2-Dichlorobenzene	5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	5.0	U
120-82-1	1,2,4-Trichlorobenzene	5.0	U
87-61-6	1,2,3-Trichlorobenzene	5.0	U

USA
1-30-09

1J - FORM I VOA-TIC
 VOLATILE ORGANICS ANALYSIS DATA SHEET
 TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

H1YQ3

Lab Name: A4 SCIENTIFIC, INC. Contract: EPW05036
 Lab Code: A4 Case No.: 38043 Mod. Ref No.: SDG No.: H1YQ0
 Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: 0009799-04
 Sample wt/vol: 5.00 (g/mL) mL Lab File ID: H4788.D
 Level: (TRACE or LOW/MED) LOW Date Received: 12/09/2008
 % Moisture: not dec. Date Analyzed: 12/15/2008
 GC Column: DB-624 ID: 0.20 (mm) Dilution Factor: 1.0
 Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)
 CONCENTRATION UNITS: (ug/L or ug/kg) ug/L Purge Volume: 5.0 (mL)

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01	UNKNOWN	4.45	8.5	J
02 000556-67-2	Cyclotetrasiloxane, octamet.	11.38	5.2	JN
03 005973-71-7	Benzaldehyde, 3,4-dimethyl-	14.82	7.2	JN
04				
05				
06				
07				
08				
09				
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18				
19				
20				
21				
22				
23				
24				
25				
26				
27				
28				
29				
30				
E966796 ¹	Total Alkanes	N/A	18	

¹EPA-designated Registry Number.

KSA
1-70-09

1A - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

H1YQ4

Lab Name: A4 SCIENTIFIC, INC. Contract: EPW05036
 Lab Code: A4 Case No.: 38043 Mod. Ref No.: SDG No.: H1YQ0
 Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: 0009799-05
 Sample wt/vol: 5.00 (g/mL) mL Lab File ID: H4800.D
 Level: (TRACE/LOW/MED) LOW Date Received: 12/09/2008
 % Moisture: not dec. Date Analyzed: 12/17/2008
 GC Column: DB-624 ID: 0.20 (mm) Dilution Factor: 1.0
 Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)
 Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg)ug/L	Q
75-71-8	Dichlorodifluoromethane	5.0	U
74-87-3	Chloromethane	5.0	U
75-01-4	Vinyl chloride	5.0	U
74-83-9	Bromomethane	5.0	U
75-00-3	Chloroethane	5.0	U
75-69-4	Trichlorofluoromethane	5.0	U
75-35-4	1,1-Dichloroethene	5.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	5.0	U
67-64-1	Acetone	10	U
75-15-0	Carbon disulfide	5.0	U
79-20-9	Methyl acetate	5.0	U
75-09-2	Methylene chloride	3.0	JB
156-60-5	trans-1,2-Dichloroethene	5.0	U
1634-04-4	Methyl tert-butyl ether	5.0	U
75-34-3	1,1-Dichloroethane	5.0	U
156-59-2	cis-1,2-Dichloroethene	5.0	U
78-93-3	2-Butanone	10	U
74-97-5	Bromochloromethane	5.0	U
67-66-3	Chloroform	5.0	U
71-55-6	1,1,1-Trichloroethane	5.0	U
110-82-7	Cyclohexane	5.0	U
56-23-5	Carbon tetrachloride	5.0	U
71-43-2	Benzene	5.0	U
107-06-2	1,2-Dichloroethane	5.0	U
123-91-1	1,4-Dioxane	100	U

Report 1,4-Dioxane for Low-Medium VOA analysis only

KSA
1-30-08

1B - FORM I VOA-2
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

H1YQ4

Lab Name: A4 SCIENTIFIC, INC. Contract: EPW05036
 Lab Code: A4 Case No.: 38043 Mod. Ref No.: SDG No.: H1YQ0
 Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: 0009799-05
 Sample wt/vol: 5.00 (g/mL) mL Lab File ID: H4800.D
 Level: (TRACE/LOW/MED) LOW Date Received: 12/09/2008
 % Moisture: not dec. Date Analyzed: 12/17/2008
 GC Column: DB-624 ID: 0.20 (mm) Dilution Factor: 1.0
 Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)
 Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
79-01-6	Trichloroethene	5.0	U
108-87-2	Methylcyclohexane	5.0	U
78-87-5	1,2-Dichloropropane	5.0	U
75-27-4	Bromodichloromethane	5.0	U
10061-01-5	cis-1,3-Dichloropropene	5.0	U
108-10-1	4-Methyl-2-pentanone	10	U
108-88-3	Toluene	5.0	U
10061-02-6	trans-1,3-Dichloropropene	5.0	U
79-00-5	1,1,2-Trichloroethane	5.0	U
127-18-4	Tetrachloroethene	5.0	U
591-78-6	2-Hexanone	10	U
124-48-1	Dibromochloromethane	5.0	U
106-93-4	1,2-Dibromoethane	5.0	U
108-90-7	Chlorobenzene	5.0	U
100-41-4	Ethylbenzene	5.0	U
95-47-6	o-Xylene	5.0	U
179601-23-1	m,p-Xylene	5.0	U
100-42-5	Styrene	5.0	U
75-25-2	Bromoform	5.0	U
98-82-8	Isopropylbenzene	5.0	U
79-34-5	1,1,2,2-Tetrachloroethane	5.0	U
541-73-1	1,3-Dichlorobenzene	5.0	U
106-46-7	1,4-Dichlorobenzene	5.0	U
95-50-1	1,2-Dichlorobenzene	5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	5.0	U
120-82-1	1,2,4-Trichlorobenzene	5.0	U
87-61-6	1,2,3-Trichlorobenzene	5.0	U

1/25/09
(-30-09)

1J - FORM I VOA-TIC
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

H1YQ4

Lab Name:	A4 SCIENTIFIC, INC.		Contract:	EPW05036		
Lab Code:	A4	Case No.:	38043	Mod. Ref No.:	SDG No.:	H1YQ0
Matrix:	(SOIL/SED/WATER)	WATER		Lab Sample ID:	0009799-05	
Sample wt/vol:	5.00	(g/mL)	mL	Lab File ID:	H4800.D	
Level:	(TRACE or LOW/MED)	LOW		Date Received:	12/09/2008	
% Moisture:	not dec.			Date Analyzed:	12/17/2008	
GC Column:	DB-624	ID:	0.20	(mm)	Dilution Factor:	1.0
Soil Extract Volume:			(uL)	Soil Aliquot Volume:	(uL)	
CONCENTRATION UNITS: (ug/L or ug/kg)	ug/L	Purge Volume:	5.0	(mL)		

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01				
02				
03				
04				
05				
06				
07				
08				
09				
10				
11				
12				
13				
14				
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21				
22				
23				
24				
25				
26				
27				
28				
29				
30				
E966796 ¹	Total Alkanes	N/A		

¹EPA-designated Registry Number.

KSA
1-3009

1A - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

H1YQ5

Lab Name:	A4 SCIENTIFIC, INC.	Contract:	EPW05036			
Lab Code:	A4	Case No.:	38043	Mod. Ref No.:	SDG No.:	H1YQ9
Matrix:	(SOIL/SED/WATER)	WATER		Lab Sample ID:	0009799-06	
Sample wt/vol:	5.00	(g/mL)	mL	Lab File ID:	H4802.D	
Level:	(TRACE/LOW/MED)	LOW		Date Received:	12/09/2008	
% Moisture:	not dec.			Date Analyzed:	12/17/2008	
GC Column:	DB-624	ID:	0.20 (mm)	Dilution Factor:	1.0	
Soil Extract Volume:		(uL)		Soil Aliquot Volume:	(uL)	
Purge Volume:	5.0	(mL)				

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
75-71-8	Dichlorodifluoromethane	5.0	U
74-87-3	Chloromethane	5.0	U
75-01-4	Vinyl chloride	5.0	U
74-83-9	Bromomethane	5.0	U
75-00-3	Chloroethane	5.0	U
75-69-4	Trichlorofluoromethane	5.0	U
75-35-4	1,1-Dichloroethene	5.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	5.0	U
67-64-1	Acetone	10	U
75-15-0	Carbon disulfide	5.0	U
79-20-9	Methyl acetate	5.0	U
75-09-2	Methylene chloride	3.3	JB
156-60-5	trans-1,2-Dichloroethene	5.0	U
1634-04-4	Methyl tert-butyl ether	5.0	U
75-34-3	1,1-Dichloroethane	5.0	U
156-59-2	cis-1,2-Dichloroethene	5.0	U
78-93-3	2-Butanone	10	U
74-97-5	Bromochloromethane	5.0	U
67-66-3	Chloroform	5.0	U
71-55-6	1,1,1-Trichloroethane	5.0	U
110-82-7	Cyclohexane	5.0	U
56-23-5	Carbon tetrachloride	5.0	U
71-43-2	Benzene	5.0	U
107-06-2	1,2-Dichloroethane	5.0	U
123-91-1	1,4-Dioxane	100	U

Report 1,4-Dioxane for Low-Medium VOA analysis only

1/3 A
1-30-09

1B - FORM I VOA-2
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

H1YQ5

Lab Name:	A4 SCIENTIFIC, INC.	Contract:	EPW05036			
Lab Code:	A4	Case No.:	38043	Mod. Ref No.:	SDG No.:	H1YQ0
Matrix:	(SOIL/SED/WATER)	WATER		Lab Sample ID:	0009799-06	
Sample wt/vol:	5.00	(g/mL)	mL	Lab File ID:	H4802.D	
Level:	(TRACE/LOW/MED)	LOW		Date Received:	12/09/2008	
% Moisture:	not dec.			Date Analyzed:	12/17/2008	
GC Column:	DB-624	ID:	0.20 (mm)	Dilution Factor:	1.0	
Soil Extract Volume:		(uL)		Soil Aliquot Volume:	(uL)	
Purge Volume:	5.0	(mL)				

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
79-01-6	Trichloroethene	5.0	U
108-87-2	Methylcyclohexane	5.0	U
78-87-5	1,2-Dichloropropane	5.0	U
75-27-4	Bromodichloromethane	5.0	U
10061-01-5	cis-1,3-Dichloropropene	5.0	U
108-10-1	4-Methyl-2-pentanone	10	U
108-88-3	Toluene	5.0	U
10061-02-6	trans-1,3-Dichloropropene	5.0	U
79-00-5	1,1,2-Trichloroethane	5.0	U
127-18-4	Tetrachloroethene	5.0	U
591-78-6	2-Hexanone	10	U
124-48-1	Dibromochloromethane	5.0	U
106-93-4	1,2-Dibromoethane	5.0	U
108-90-7	Chlorobenzene	5.0	U
100-41-4	Ethylbenzene	5.0	U
95-47-6	o-Xylene	5.0	U
179601-23-1	m, p-Xylene	5.0	U
100-42-5	Styrene	5.0	U
75-25-2	Bromoform	5.0	U
98-82-8	Isopropylbenzene	5.0	U
79-34-5	1,1,2-Tetrachloroethane	5.0	U
541-73-1	1,3-Dichlorobenzene	5.0	U
106-46-7	1,4-Dichlorobenzene	5.0	U
95-50-1	1,2-Dichlorobenzene	5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	5.0	U
120-82-1	1,2,4-Trichlorobenzene	5.0	U
87-61-6	1,2,3-Trichlorobenzene	5.0	U

✓A
1-30-09

1J - FORM I VOA-TIC
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

H1YQ5

Lab Name:	A4 SCIENTIFIC, INC.			Contract:	EPW05036
Lab Code:	A4	Case No.:	38043	Mod. Ref No.:	SDG No.: H1YQ0
Matrix:	(SOIL/SED/WATER)	WATER		Lab Sample ID:	0009799-06
Sample wt/vol:	5.00	(g/mL)	mL	Lab File ID:	H4802.D
Level:	(TRACE or LOW/MED)	LOW		Date Received:	12/09/2008
% Moisture:	not dec.			Date Analyzed:	12/17/2008
GC Column:	DB-624	ID:	0.20 (mm)	Dilution Factor:	1.0
Soil Extract Volume:			(uL)	Soil Aliquot Volume:	(uL)
CONCENTRATION UNITS: (ug/L or ug/kg)			ug/L	Purge Volume:	5.0 (mL)

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01 005973-71-7	Benzaldehyde, 3,4-dimethyl-	14.82	6.6	JN
02				
03				
04				
05				
06				
07				
08				
09				
10				
11				
12				
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23				
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26				
27				
28				
29				
30				
E966796 ¹	Total Alkanes	N/A		

¹EPA-designated Registry Number.

KFA
1-30-09

1A - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

H1YQ6

Lab Name: A4 SCIENTIFIC, INC. Contract: EPW05036
 Lab Code: A4 Case No.: 38043 Mod. Ref No.: SDG No.: H1YQ0
 Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: 0009799-07
 Sample wt/vol: 5.00 (g/mL) mL Lab File ID: H4784.D
 Level: (TRACE/LOW/MED) LOW Date Received: 12/09/2008
 % Moisture: not dec. Date Analyzed: 12/15/2008
 GC Column: DB-624 ID: 0.20 (mm) Dilution Factor: 1.0
 Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)
 Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg)ug/L	Q
75-71-8	Dichlorodifluoromethane	5.0	U
74-87-3	Chloromethane	5.0	U
75-01-4	Vinyl chloride	5.0	U
74-83-9	Bromomethane	5.0	U
75-00-3	Chloroethane	5.0	U
75-69-4	Trichlorofluoromethane	5.0	U
75-35-4	1,1-Dichloroethene	5.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	5.0	U
67-64-1	Acetone	10	U
75-15-0	Carbon disulfide	5.0	U
79-20-9	Methyl acetate	5.0	U
75-09-2	Methylene chloride	5.0	U
156-60-5	trans-1,2-Dichloroethene	5.0	U
1634-04-4	Methyl tert-butyl ether	5.0	U
75-34-3	1,1-Dichloroethane	5.0	U
156-59-2	cis-1,2-Dichloroethene	5.0	U
78-93-3	2-Butanone	10	U
74-97-5	Bromochloromethane	5.0	U
67-66-3	Chloroform	5.0	U
71-55-6	1,1,1-Trichloroethane	5.0	U
110-82-7	Cyclohexane	5.0	U
56-23-5	Carbon tetrachloride	5.0	U
71-43-2	Benzene	5.0	U
107-06-2	1,2-Dichloroethane	5.0	U
123-91-1	1,4-Dioxane	100	U

Report 1,4-Dioxane for Low-Medium VOA analysis only

LSA
1-30-09

1B - FORM I VOA-2
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

H1YQ6

Lab Name: A4 SCIENTIFIC, INC. Contract: EPW05036
 Lab Code: A4 Case No.: 38043 Mod. Ref No.: SDG No.: H1YQ0
 Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: 0009799-07
 Sample wt/vol: 5.00 (g/mL) mL Lab File ID: H4784.D
 Level: (TRACE/LOW/MED) LOW Date Received: 12/09/2008
 % Moisture: not dec. Date Analyzed: 12/15/2008
 GC Column: DB-624 ID: 0.20 (mm) Dilution Factor: 1.0
 Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)
 Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
79-01-6	Trichloroethene	5.0	U
108-87-2	Methylcyclohexane	5.0	U
78-87-5	1,2-Dichloropropane	5.0	U
75-27-4	Bromodichloromethane	5.0	U
10061-01-5	cis-1,3-Dichloropropene	5.0	U
108-10-1	4-Methyl-2-pentanone	10	U
108-88-3	Toluene	5.0	U
10061-02-6	trans-1,3-Dichloropropene	5.0	U
79-00-5	1,1,2-Trichloroethane	5.0	U
127-18-4	Tetrachloroethene	5.0	U
591-78-6	2-Hexanone	10	U
124-48-1	Dibromochloromethane	5.0	U
106-93-4	1,2-Dibromoethane	5.0	U
108-90-7	Chlorobenzene	5.0	U
100-41-4	Ethylbenzene	5.0	U
95-47-6	o-Xylene	5.0	U
179601-23-1	m,p-Xylene	5.0	U
100-42-5	Styrene	5.0	U
75-25-2	Bromoform	5.0	U
98-82-8	Isopropylbenzene	5.0	U
79-34-5	1,1,2,2-Tetrachloroethane	5.0	U
541-73-1	1,3-Dichlorobenzene	5.0	U
106-46-7	1,4-Dichlorobenzene	5.0	U
95-50-1	1,2-Dichlorobenzene	5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	5.0	U
120-82-1	1,2,4-Trichlorobenzene	5.0	U
87-61-6	1,2,3-Trichlorobenzene	5.0	U

VS
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KSA
1-30-09

1J - FORM I VOA-TIC
 VOLATILE ORGANICS ANALYSIS DATA SHEET
 TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

H1YQ6

Lab Name: A4 SCIENTIFIC, INC. Contract: EPW05036
 Lab Code: A4 Case No.: 38043 Mod. Ref No.: SDG No.: H1YQ6
 Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: 0009799-07
 Sample wt/vol: 5.00 (g/mL) mL Lab File ID: H4784.D
 Level: (TRACE or LOW/MED) LOW Date Received: 12/09/2008
 % Moisture: not dec. Date Analyzed: 12/15/2008
 GC Column: DB-624 ID: 0.20 (mm) Dilution Factor: 1.0
 Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)
 CONCENTRATION UNITS: (ug/L or ug/kg) ug/L Purge Volume: 5.0 (mL)

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01 000556-67-2	Cyclotetrasiloxane, octamethyl-	11.38	25	JN
02 015764-16-6	Benzaldehyde, 2,4-dimethyl-	14.82	6.6	JN
03				
04				
05				
06				
07				
08				
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30				
E966796 ¹	Total Alkanes	N/A		

¹EPA-designated Registry Number.

KSA
 1-30-09

1A - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

H1YQ7

Lab Name: A4 SCIENTIFIC, INC. Contract: EPW05036
 Lab Code: A4 Case No.: 38043 Mod. Ref No.: SDG No.: H1YQ0
 Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: 0009799-08
 Sample wt/vol: 5.00 (g/mL) mL Lab File ID: H4799.D
 Level: (TRACE/LOW/MED) LOW Date Received: 12/09/2008
 % Moisture: not dec. Date Analyzed: 12/17/2008
 GC Column: DB-624 ID: 0.20 (mm) Dilution Factor: 1.0
 Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)
 Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
75-71-8	Dichlorodifluoromethane	5.0	U
74-87-3	Chloromethane	5.0	U
75-01-4	Vinyl chloride	150	
74-83-9	Bromomethane	5.0	U
75-00-3	Chloroethane	5.0	U
75-69-4	Trichlorofluoromethane	5.0	U
75-35-4	1,1-Dichloroethene	5.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	5.0	U
67-64-1	Acetone	10	U
75-15-0	Carbon disulfide	5.0	U
79-20-9	Methyl acetate	5.0	U
75-09-2	Methylene chloride	5.0	U
156-60-5	trans-1,2-Dichloroethene	82	
1634-04-4	Methyl tert-butyl ether	5.0	U
75-34-3	1,1-Dichloroethane	5.0	U
156-59-2	cis-1,2-Dichloroethene	3300	E
78-93-3	2-Butanone	10	U
74-97-5	Bromochloromethane	5.0	U
67-66-3	Chloroform	5.0	U
71-55-6	1,1,1-Trichloroethane	5.0	U
110-82-7	Cyclohexane	79	U
56-23-5	Carbon tetrachloride	5.0	U
71-43-2	Benzene	5.0	U
107-06-2	1,2-Dichloroethane	5.0	U
123-91-1	1,4-Dioxane	100	U

Report 1,4-Dioxane for Low-Medium VOA analysis only

USE THE VALUE from DILUTION FOR CIS-1,2-DICHLOROETHENE

VERA
(-30-09)

1B - FORM I VOA-2
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

H1YQ7

Lab Name: A4 SCIENTIFIC, INC. Contract: EPW05036
 Lab Code: A4 Case No.: 38043 Mod. Ref No.: SDG No.: H1YQ0
 Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: 0009799-08
 Sample wt/vol: 5.00 (g/mL) mL Lab File ID: H4799.D
 Level: (TRACE/LOW/MED) LOW Date Received: 12/09/2008
 % Moisture: not dec. Date Analyzed: 12/17/2008
 GC Column: DB-624 ID: 0.20 (mm) Dilution Factor: 1.0
 Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)
 Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
79-01-6	Trichloroethene	97	
108-87-2	Methylcyclohexane	17	
78-87-5	1,2-Dichloropropane	6.5	
75-27-4	Bromodichloromethane	5.0	U
10061-01-5	cis-1,3-Dichloropropene	5.0	U
108-10-1	4-Methyl-2-pentanone	10	U
108-88-3	Toluene	12	
10061-02-6	trans-1,3-Dichloropropene	5.0	U
79-00-5	1,1,2-Trichloroethane	34	
127-18-4	Tetrachloroethene	1700	E
591-78-6	2-Hexanone	10	U
124-48-1	Dibromochloromethane	5.0	U
106-93-4	1,2-Dibromoethane	5.0	U
108-90-7	Chlorobenzene	5.0	U
100-41-4	Ethylbenzene	5.0	U
95-47-6	o-Xylene	5.0	U
179601-23-1	m, p-Xylene	5.0	U
100-42-5	Styrene	5.0	U
75-25-2	Bromoform	5.0	U
98-82-8	Isopropylbenzene	1.6	J
79-34-5	1,1,2,2-Tetrachloroethane	5.0	U
541-73-1	1,3-Dichlorobenzene	5.0	U
106-46-7	1,4-Dichlorobenzene	5.0	U
95-50-1	1,2-Dichlorobenzene	5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	5.0	U
120-82-1	1,2,4-Trichlorobenzene	5.0	U
87-61-6	1,2,3-Trichlorobenzene	5.0	U

USE THE VALUE FROM DILUTED RUN FOR TETRACHLOROETHENE

13009
13009

1J - FORM I VOA-TIC
 VOLATILE ORGANICS ANALYSIS DATA SHEET
 TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

H1YQ7

Lab Name:	A4 SCIENTIFIC, INC.	Contract:	EPW05036			
Lab Code:	A4	Case No.:	38043	Mod. Ref No.:	SDG No.:	H1YQ0
Matrix:	(SOIL/SED/WATER)	WATER	Lab Sample ID:	0009799-08		
Sample wt/vol:	5.00	(g/mL)	mL	Lab File ID:	H4799.D	
Level:	(TRACE or LOW/MED)	LOW	Date Received:	12/09/2008		
% Moisture:	not dec.		Date Analyzed:	12/17/2008		
GC Column:	DB-624	ID:	0.20 (mm)	Dilution Factor:	1.0	
Soil Extract Volume:		(uL)	Soil Aliquot Volume:	(uL)		
CONCENTRATION UNITS:	(ug/L or ug/kg)	ug/L	Purge Volume:	5.0	(mL)	

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01	UNKNOWN	4.79	53	J
02	Cyclotetrasiloxane, octamet.	11.38	22	JN
03	Pentalene, octahydro-2-methy	11.75	9.2	JN
04	Benzene, (2-methylpropyl)-	12.17	14	JN
05	Benzene, 1-methyl-4-propyl-	12.22	45	JN
06	Benzene, 1-methyl-3-(1-meth.	12.63	14	JN
07	Indane	12.70	48	JN
08	Benzene, 1,4-diethyl-	12.74	15	JN
09	1-Phenyl-1-butene	13.22	13	JN
10	Benzene, 1-ethenyl-3-ethyl-	13.29	32	JN
11	1H-Indene, 2,3-dihydro-1,1-.	13.46	13	JN
12	1H-Indene, 2,3-dihydro-5-me.	13.98	19	JN
13	1H-Indene, 2,3-dihydro-1,6-.	14.25	9.5	JN
14	1H-Indene, 2,3-dihydro-1,1-.	14.34	12	JN
15	1H-Indene, 2,3-dihydro-1,6-.	14.37	23	JN
16				
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26				
27				
28				
29				
30				
E966796 ¹	Total Alkanes	N/A	560	

¹EPA-designated Registry Number.

13A
13009

1A - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

H1YQ7DL

Lab Name: A4 SCIENTIFIC, INC. Contract: EPW05036

Lab Code: A4 Case No.: 38043 Mod. Ref No.: SDG No.: H1YQ0

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: 0009799-08RE1

Sample wt/vol: 5.00 (g/mL) mL Lab File ID: H4803.D

Level: (TRACE/LOW/MED) LOW Date Received: 12/09/2008

% Moisture: not dec. Date Analyzed: 12/17/2008

GC Column: DB-624 ID: 0.20 (mm) Dilution Factor: 50.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
75-71-8	Dichlorodifluoromethane	250	U
74-87-3	Chloromethane	250	U
75-01-4	Vinyl chloride	160	JD
74-83-9	Bromomethane	250	U
75-00-3	Chloroethane	250	U
75-69-4	Trichlorodifluoromethane	250	U
75-35-4	1,1-Dichloroethene	250	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	250	U
67-64-1	Acetone	500	U
75-15-0	Carbon disulfide	250	U
79-20-9	Methyl acetate	250	U
75-09-2	Methylene chloride	140	JD
156-60-5	trans-1,2-Dichloroethene	85	JD
1634-04-4	Methyl tert-butyl ether	250	U
75-34-3	1,1-Dichloroethane	250	U
156-59-2	cis-1,2-Dichloroethene	4700	D
78-93-3	2-Butanone	500	U
74-97-5	Bromochloromethane	250	U
67-66-3	Chloroform	250	U
71-55-6	1,1,1-Trichloroethane	250	U
110-82-7	Cyclohexane	250	U
56-23-5	Carbon tetrachloride	250	U
71-43-2	Benzene	250	U
107-06-2	1,2-Dichloroethane	250	U
123-91-1	1,4-Dioxane	5000	U

500 U

Report 1,4-Dioxane for Low-Medium VOA analysis only

ONLY USE CIS-1,2-DICHLOROETHANE! TETRACHLOROETHENE FROM AEROSOL

PLA
1-30-09

1B - FORM I VOA-2
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

H1YQ7DL

Lab Name: A4 SCIENTIFIC, INC. Contract: EPW05036
 Lab Code: A4 Case No.: 38043 Mod. Ref No.: SDG No.: H1YQ0
 Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: 0009799-D8RE1
 Sample wt/vol: 5.00 (g/mL) mL Lab File ID: H4803.D
 Level: (TRACE/LOW/MED) LOW Date Received: 12/09/2008
 % Moisture: not dec. Date Analyzed: 12/17/2008
 GC Column: DB-624 ID: 0.20 (mm) Dilution Factor: 50.0
 Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)
 Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
79-01-6	Trichloroethene	110	JD
108-87-2	Methylcyclohexane	250	U
78-87-5	1,2-Dichloropropane	250	U
75-27-4	Bromodichloromethane	250	U
10061-01-5	cis-1,3-Dichloropropene	250	U
108-10-1	4-Methyl-2-pentanone	500	U
108-88-3	Toluene	250	U
10061-02-6	trans-1,3-Dichloropropene	250	U
79-00-5	1,1,2-Trichloroethane	250	U
127-18-4	Tetrachloroethene	2300	D
591-78-6	2-Hexanone	500	U
124-48-1	Dibromochloromethane	250	U
106-93-4	1,2-Dibromoethane	250	U
108-90-7	Chlorobenzene	250	U
100-41-4	Ethylbenzene	250	U
95-47-6	o-Xylene	250	U
179601-23-1	m, p-Xylene	250	U
100-42-5	Styrene	250	U
75-25-2	Bromoform	250	U
98-82-8	Isopropylbenzene	250	U
79-34-5	1,1,2,2-Tetrachloroethane	250	U
541-73-1	1,3-Dichlorobenzene	250	U
106-46-7	1,4-Dichlorobenzene	250	U
95-50-1	1,2-Dichlorobenzene	250	U
96-12-8	1,2-Dibromo-3-chloropropane	250	U
120-82-1	1,2,4-Trichlorobenzene	250	U
87-61-6	1,2,3-Trichlorobenzene	250	U

ONLY USE CIS-1,2-DICHLOROETHANE! TETRA CHLOROETHENE FROM SULZER!

KSA
1-30-09

1J - FORM I VOA-TIC
 VOLATILE ORGANICS ANALYSIS DATA SHEET
 TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

H1YQ7DL

Lab Name:	A4 SCIENTIFIC, INC.			Contract:	EPW05036	
Lab Code:	A4	Case No.:	38043	Mod. Ref No.:	SDG No.:	H1YQ0
Matrix:	(SOIL/SED/WATER)	WATER		Lab Sample ID:	0009799-08RE1	
Sample wt/vol:	5.00	(g/mL)	mL	Lab File ID:	H4803.D	
Level:	(TRACE or LOW/MED)	LOW		Date Received:	12/09/2008	
% Moisture:	not dec.			Date Analyzed:	12/17/2008	
GC Column:	DB-624	ID:	0.20	(mm)	Dilution Factor:	50.0
Soil Extract Volume:			(uL)	Soil Aliquot Volume:	(uL)	
CONCENTRATION UNITS: (ug/L or ug/kg)	ug/L		Purge Volume:	5.0	(mL)	

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01	UNKNOWN	13.47	270	JD
02				
03				
04				
05				
06				
07				
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29				
30				
E966796 ¹	Total Alkanes	N/A		

¹EPA-designated Registry Number.

VSA
1-30-09

1A - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

H1YQ8

Lab Name: A4 SCIENTIFIC, INC. Contract: EPW05036
 Lab Code: A4 Case No.: 38043 Mod. Ref No.: SDG No.: H1YQ0
 Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: 0009799-09
 Sample wt/vol: 5.00 (g/mL) mL Lab File ID: H4785.D
 Level: (TRACE/LOW/MED) LOW Date Received: 12/09/2008
 % Moisture: not dec. Date Analyzed: 12/15/2008
 GC Column: DB-624 ID: 0.20 (mm) Dilution Factor: 1.0
 Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)
 Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
75-71-8	Dichlorodifluoromethane	5.0	U
74-87-3	Chloromethane	5.0	U
75-01-4	Vinyl chloride	5.0	U
74-83-9	Bromomethane	5.0	U
75-00-3	Chloroethane	5.0	U
75-69-4	Trichlorofluoromethane	5.0	U
75-35-4	1,1-Dichloroethene	5.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	5.0	U
67-64-1	Acetone	10	U
75-15-0	Carbon disulfide	5.0	U
79-20-9	Methyl acetate	5.0	U
75-09-2	Methylene chloride	5.0	U
156-60-5	trans-1,2-Dichloroethene	5.0	U
1634-04-4	Methyl tert-butyl ether	5.0	U
75-34-3	1,1-Dichloroethane	5.0	U
156-59-2	cis-1,2-Dichloroethene	5.0	U
78-93-3	2-Butanone	10	U
74-97-5	Bromochloromethane	5.0	U
67-66-3	Chloroform	5.0	U
71-55-6	1,1,1-Trichloroethane	5.0	U
110-82-7	Cyclohexane	5.0	U
56-23-5	Carbon tetrachloride	5.0	U
71-43-2	Benzene	5.0	U
107-06-2	1,2-Dichloroethane	5.0	U
123-91-1	1,4-Dioxane	100	U

Report 1,4-Dioxane for Low-Medium VOA analysis only

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US
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US

1/5/09
1-30-09

1B - FORM I VOA-2
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

H1YQ8

Lab Name: A4 SCIENTIFIC, INC. Contract: EPW05036
 Lab Code: A4 Case No.: 38043 Mod. Ref No.: SDG No.: H1YQ0
 Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: 0009799-09
 Sample wt/vol: 5.00 (g/mL) mL Lab File ID: H4785.D
 Level: (TRACE/LOW/MED) LOW Date Received: 12/09/2008
 % Moisture: not dec. Date Analyzed: 12/15/2008
 GC Column: DB-624 ID: 0.20 (mm) Dilution Factor: 1.0
 Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)
 Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
79-01-6	Trichloroethene	5.0	U
108-87-2	Methylcyclohexane	5.0	U
78-87-5	1,2-Dichloropropane	5.0	U
75-27-4	Bromodichloromethane	5.0	U
10061-01-5	cis-1,3-Dichloropropene	5.0	U
108-10-1	4-Methyl-2-pentanone	10	U
108-88-3	Toluene	5.0	U
10061-02-6	trans-1,3-Dichloropropene	5.0	U
79-00-5	1,1,2-Trichloroethane	5.0	U
127-18-4	Tetrachloroethene	5.0	U
591-78-6	2-Hexanone	10	U
124-48-1	Dibromochloromethane	5.0	U
106-93-4	1,2-Dibromoethane	5.0	U
108-90-7	Chlorobenzene	5.0	U
100-41-4	Ethylbenzene	5.0	U
95-47-6	o-Xylene	5.0	U
179601-23-1	m, p-Xylene	5.0	U
100-42-5	Styrene	5.0	U
75-25-2	Bromoform	5.0	U
98-82-8	Isopropylbenzene	5.0	U
79-34-5	1,1,2,2-Tetrachloroethane	5.0	U
541-73-1	1,3-Dichlorobenzene	5.0	U
106-46-7	1,4-Dichlorobenzene	5.0	U
95-50-1	1,2-Dichlorobenzene	5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	5.0	U
120-82-1	1,2,4-Trichlorobenzene	5.0	U
87-61-6	1,2,3-Trichlorobenzene	5.0	U

K&A
1-30-09

1J - FORM I VOA-TIC
 VOLATILE ORGANICS ANALYSIS DATA SHEET
 TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

H1YQ8

Lab Name: A4 SCIENTIFIC, INC. Contract: EPW05036
 Lab Code: A4 Case No.: 38043 Mod. Ref No.: SDG No.: H1YQ0
 Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: 0009799-09
 Sample wt/vol: 5.00 (g/mL) mL Lab File ID: H4785.D
 Level: (TRACE or LOW/MED) LOW Date Received: 12/09/2008
 % Moisture: not dec. Date Analyzed: 12/15/2008
 GC Column: DB-624 ID: 0.20 (mm) Dilution Factor: 1.0
 Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)
 CONCENTRATION UNITS: (ug/L or ug/kg) ug/L Purge Volume: 5.0 (mL)

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01 000556-67-2	Cyclotetrasiloxane, octamethyl-	11.38	44	JN
02	UNKNOWN	13.47	5.1	J
03 005779-95-3	Benzaldehyde, 3,5-dimethyl-	14.82	6.2	JN
04				
05				
06				
07				
08				
09				
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27				
28				
29				
30				
E966796 ¹	Total Alkanes	N/A		

¹EPA-designated Registry Number.

KSA
1-30-09

1A - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

H2560

Lab Name: A4 SCIENTIFIC, INC. Contract: EPW05036
 Lab Code: A4 Case No.: 38043 Mod. Ref No.: SDG No.: H1YQ0
 Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: 0009799-10
 Sample wt/vol: 5.00 (g/mL) mL Lab File ID: H4786.D
 Level: (TRACE/LOW/MED) LOW Date Received: 12/09/2008
 % Moisture: not dec. Date Analyzed: 12/15/2008
 GC Column: DB-624 ID: 0.20 (mm) Dilution Factor: 1.0
 Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)
 Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
75-71-8	Dichlorodifluoromethane	5.0	U
74-87-3	Chloromethane	5.0	U
75-01-4	Vinyl chloride	5.0	U
74-83-9	Bromomethane	5.0	U
75-00-3	Chloroethane	5.0	U
75-69-4	Trichlorofluoromethane	5.0	U
75-35-4	1,1-Dichloroethene	5.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	5.0	U
67-64-1	Acetone	10	U
75-15-0	Carbon disulfide	5.0	U
79-20-9	Methyl acetate	5.0	U
75-09-2	Methylene chloride	5.0	U
156-60-5	trans-1,2-Dichloroethene	5.0	U
1634-04-4	Methyl tert-butyl ether	5.0	U
75-34-3	1,1-Dichloroethane	5.0	U
156-59-2	cis-1,2-Dichloroethene	5.0	U
78-93-3	2-Butanone	10	U
74-97-5	Bromochloromethane	5.0	U
67-66-3	Chloroform	5.0	U
71-55-6	1,1,1-Trichloroethane	5.0	U
110-82-7	Cyclohexane	5.0	U
56-23-5	Carbon tetrachloride	5.0	U
71-43-2	Benzene	5.0	U
107-06-2	1,2-Dichloroethane	5.0	U
123-91-1	1,4-Dioxane	100	U

Report 1,4-Dioxane for Low-Medium VOA analysis only

UJ

VA
1-30-09

1B - FORM I VOA-2
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

H2560

Lab Name: A4 SCIENTIFIC, INC. Contract: EPW05036

Lab Code: A4 Case No.: 38043 Mod. Ref No.: SDG No.: H1YQ0

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: 0009799-10

Sample wt/vol: 5.00 (g/mL) mL Lab File ID: H4786.D

Level: (TRACE/LOW/MED) LOW Date Received: 12/09/2008

% Moisture: not dec. Date Analyzed: 12/15/2008

GC Column: DB-624 ID: 0.20 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg)ug/L	Q
79-01-6	Trichloroethene	5.0	U
108-87-2	Methylcyclohexane	5.0	U
78-87-5	1,2-Dichloropropane	5.0	U
75-27-4	Bromodichloromethane	5.0	U
10061-01-5	cis-1,3-Dichloropropene	5.0	U
108-10-1	4-Methyl-2-pentanone	10	U
108-88-3	Toluene	5.0	U
10061-02-6	trans-1,3-Dichloropropene	5.0	U
79-00-5	1,1,2-Trichloroethane	5.0	U
127-18-4	Tetrachloroethene	5.0	U
591-78-6	2-Hexanone	10	U
124-48-1	Dibromochloromethane	5.0	U
106-93-4	1,2-Dibromoethane	5.0	U
108-90-7	Chlorobenzene	5.0	U
100-41-4	Ethylbenzene	5.0	U
95-47-6	o-Xylene	5.0	U
179601-23-1	m,p-Xylene	5.0	U
100-42-5	Styrene	5.0	U
75-25-2	Bromoform	5.0	U
98-82-8	Isopropylbenzene	5.0	U
79-34-5	1,1,2-Tetrachloroethane	5.0	U
541-73-1	1,3-Dichlorobenzene	5.0	U
106-46-7	1,4-Dichlorobenzene	5.0	U
95-50-1	1,2-Dichlorobenzene	5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	5.0	U
120-82-1	1,2,4-Trichlorobenzene	5.0	U
87-61-6	1,2,3-Trichlorobenzene	5.0	U

VSA
1-30-09

1J - FORM I VOA-TIC
 VOLATILE ORGANICS ANALYSIS DATA SHEET
 TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

H2560

Lab Name:	A4 SCIENTIFIC, INC.			Contract:	EPW05036
Lab Code:	A4	Case No.:	38043	Mod. Ref No.:	SDG No.: H1YQ0
Matrix:	(SOIL/SED/WATER)	WATER		Lab Sample ID:	0009799-10
Sample wt/vol:	5.00	(g/mL)	mL	Lab File ID:	H4786.D
Level:	(TRACE or LOW/MED)	LOW		Date Received:	12/09/2008
% Moisture:	not dec.			Date Analyzed:	12/15/2008
GC Column:	DB-624	ID:	0.20 (mm)	Dilution Factor:	1.0
Soil Extract Volume:			(uL)	Soil Aliquot Volume:	(uL)
CONCENTRATION UNITS: (ug/L or ug/kg)	ug/L		Purge Volume:	5.0	(mL)

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01 000556-67-2	Cyclotetrasiloxane, octamethyl-	11.38	38	JN
02 001470-94-6	1H-Inden-5-ol, 2,3-dihydro-	14.82	6.4	JN
03				
04				
05				
06				
07				
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26				
27				
28				
29				
30				
E966796 ¹	Total Alkanes	N/A		

¹EPA-designated Registry Number.

5A
1-30-08

1A - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

H2561

Lab Name: A4 SCIENTIFIC, INC. Contract: EPW05036
 Lab Code: A4 Case No.: 38043 Mod. Ref No.: SDG No.: H1YQ0
 Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: 0009799-11
 Sample wt/vol: 5.00 (g/mL) mL Lab File ID: H4801.D
 Level: (TRACE/LOW/MED) LOW Date Received: 12/09/2008
 % Moisture: not dec. Date Analyzed: 12/17/2008
 GC Column: DB-624 ID: 0.20 (mm) Dilution Factor: 1.0
 Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)
 Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
75-71-8	Dichlorodifluoromethane	5.0	U
74-87-3	Chloromethane	5.0	U
75-01-4	Vinyl chloride	180	
74-83-9	Bromomethane	5.0	U
75-00-3	Chloroethane	5.0	U
75-69-4	Trichlorofluoromethane	5.0	U
75-35-4	1,1-Dichloroethene	5.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	5.0	U
67-64-1	Acetone	100	
75-15-0	Carbon disulfide	5.0	U
79-20-9	Methyl acetate	5.0	U
75-09-2	Methylene chloride	3.7	JB
156-60-5	trans-1,2-Dichloroethene	88	
1634-04-4	Methyl tert-butyl ether	5.0	U
75-34-3	1,1-Dichloroethane	5.0	U
156-59-2	cis-1,2-Dichloroethene	3200	E
78-93-3	2-Butanone	10	U
74-97-5	Bromochloromethane	5.0	U
67-66-3	Chloroform	5.0	U
71-55-6	1,1,1-Trichloroethane	5.0	U
110-82-7	Cyclohexane	71	
56-23-5	Carbon tetrachloride	5.0	U
71-43-2	Benzene	5.0	U
107-06-2	1,2-Dichloroethane	5.0	U
123-91-1	1,4-Dioxane	100	U

Report 1,4-Dioxane for Low-Medium VOA analysis only

USE THE VALUE FROM DILUTION ROW FOR cis-1,2-Dichloroethene

KSA
1-30-09

1B - FORM I VOA-2
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

H2561

Lab Name:	A4 SCIENTIFIC, INC.	Contract:	EPW05036			
Lab Code:	A4	Case No.:	38043	Mod. Ref No.:	SDG No.:	H1YQ0
Matrix:	(SOIL/SED/WATER)	WATER		Lab Sample ID:	0009799-11	
Sample wt/vol:	5.00	(g/mL)	mL	Lab File ID:	H4801.D	
Level:	(TRACE/LOW/MED)	LOW		Date Received:	12/09/2008	
% Moisture:	not dec.			Date Analyzed:	12/17/2008	
GC Column:	DB-624	ID:	0.20 (mm)	Dilution Factor:	1.0	
Soil Extract Volume:		(uL)	Soil Aliquot Volume:	(uL)		
Purge Volume:	5.0	(mL)				

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
79-01-6	Trichloroethene	110	
108-87-2	Methylcyclohexane	16	
78-87-5	1,2-Dichloropropane	5.0	U
75-27-4	Bromodichloromethane	5.0	U
10061-01-5	cis-1,3-Dichloropropene	5.0	U
108-10-1	4-Methyl-2-pentanone	10	U
108-88-3	Toluene	12	
10061-02-6	trans-1,3-Dichloropropene	5.0	U
79-00-5	1,1,2-Trichloroethane	5.0	U
127-18-4	Tetrachloroethene	1700	E
591-78-6	2-Hexanone	10	U
124-48-1	Dibromochloromethane	5.0	U
106-93-4	1,2-Dibromoethane	5.0	U
108-90-7	Chlorobenzene	5.0	U
100-41-4	Ethylbenzene	5.0	U
95-47-6	o-Xylene	5.0	U
179601-23-1	m,p-Xylene	5.0	U
100-42-5	Styrene	5.0	U
75-25-2	Bromoform	5.0	U
98-82-8	Isopropylbenzene	5.0	U
79-34-5	1,1,2,2-Tetrachloroethane	5.0	U
541-73-1	1,3-Dichlorobenzene	5.0	U
106-46-7	1,4-Dichlorobenzene	5.0	U
95-50-1	1,2-Dichlorobenzene	5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	5.0	U
120-82-1	1,2,4-Trichlorobenzene	5.0	U
87-61-6	1,2,3-Trichlorobenzene	5.0	U

21000 D

USE THE VALUE FROM DILUTION RATIO FOR TETRACHLOROETHENE

VBA
1-30-09

1J - FORM I VOA-TIC
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

H2561

Lab Name:	A4 SCIENTIFIC, INC.		Contract:	EPW05036	
Lab Code:	A4	Case No.:	38043	Mod. Ref No.:	SDG No.:
Matrix:	(SOIL/SED/WATER)	WATER	Lab Sample ID:	0009799-11	
Sample wt/vol:	5.00	(g/mL)	mL	Lab File ID:	H4801.D
Level:	(TRACE or LOW/MED)	LOW	Date Received:	12/09/2008	
% Moisture:	not dec.		Date Analyzed:	12/17/2008	
GC Column:	DB-624	ID:	0.20 (mm)	Dilution Factor:	1.0
Soil Extract Volume:		(uL)	Soil Aliquot Volume:	(uL)	
CONCENTRATION UNITS: (ug/L or ug/kg) ug/L			Purge Volume:	5.0	(mL)

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01 000556-67-2	Cyclotetrasiloxane, octamethyl-	11.38	17	JN
02 000280-65-9	Bicyclo[3.3.1]nonane	11.75	9.0	JN
03	UNKNOWN	11.94	9.1	J
04 000538-93-2	Benzene, (2-methylpropyl)-	12.18	13	JN
05 001074-55-1	Benzene, 1-methyl-4-propyl-	12.22	45	JN
06 000527-84-4	Benzene, 1-methyl-2-(1-meth.	12.63	14	JN
07 000496-11-7	Indane	12.70	45	JN
08 000141-93-5	Benzene, 1,3-diethyl-	12.74	13	JN
09 007525-62-4	Benzene, 1-ethenyl-3-ethyl-	13.23	12	JN
10 000824-90-8	1-Phenyl-1-butene	13.29	31	JN
11 004912-92-9	1H-Indene, 2,3-dihydro-1,1-.	13.46	14	JN
12 000824-22-6	1H-Indene, 2,3-dihydro-4-me.	13.97	17	JN
13 004912-92-9	1H-Indene, 2,3-dihydro-1,1-.	14.35	11	JN
14 020836-11-7	1H-Indene, 2,3-dihydro-2,2-d.	14.37	23	JN
15				
16				
17				
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25				
26				
27				
28				
29				
30				
E966796 ¹	Total Alkanes	N/A	490	

¹EPA-designated Registry Number.

1/30/09
LSA

1A - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

H2561DL

Lab Name: A4 SCIENTIFIC, INC. Contract: EPW05036
 Lab Code: A4 Case No.: 38043 Mod. Ref No.: SDG No.: H1YQ0
 Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: 0009799-11RE1
 Sample wt/vol: 5.00 (g/mL) mL Lab File ID: H4804.D
 Level: (TRACE/LOW/MED) LOW Date Received: 12/09/2008
 % Moisture: not dec. Date Analyzed: 12/17/2008
 GC Column: DB-624 ID: 0.20 (mm) Dilution Factor: 50.0
 Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)
 Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
75-71-8	Dichlorodifluoromethane	250	U
74-87-3	Chloromethane	250	U
75-01-4	Vinyl chloride	130	JD
74-83-9	Bromomethane	250	U
75-00-3	Chloroethane	250	U
75-69-4	Trichlorodifluoromethane	250	U
75-35-4	1,1-Dichloroethene	250	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	250	U
67-64-1	Acetone	250	JD
75-15-0	Carbon disulfide	250	U
79-20-9	Methyl acetate	250	U
75-09-2	Methylene chloride	130	JBD
156-60-5	trans-1,2-Dichloroethene	76	JD
1634-04-4	Methyl tert-butyl ether	250	U
75-34-3	1,1-Dichloroethane	0.78	JD
156-59-2	cis-1,2-Dichloroethene	4100	D
78-93-3	2-Butanone	500	U
74-97-5	Bromoform	250	U
67-66-3	Chloroform	250	U
71-55-6	1,1,1-Trichloroethane	250	U
110-82-7	Cyclohexane	250	U
56-23-5	Carbon tetrachloride	250	U
71-43-2	Benzene	250	U
107-06-2	1,2-Dichloroethane	250	U
123-91-1	1,4-Dioxane	5000	U

Report 1,4-Dioxane for Low-Medium VOA analysis only

ONLY USE CIS-1,2-DICHLOROETHANE AND TETRACHLOROETHENE FROM AEROMAT

1B - FORM I VOA-2
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

H2561DL

Lab Name: A4 SCIENTIFIC, INC. Contract: EPW05036
 Lab Code: A4 Case No.: 38043 Mod. Ref No.: SDG No.: H1YQ0
 Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: 0009799-11RE1
 Sample wt/vol: 5.00 (g/mL) mL Lab File ID: H4804.D
 Level: (TRACE/LOW/MED) LOW Date Received: 12/09/2008
 % Moisture: not dec. Date Analyzed: 12/17/2008
 GC Column: DB-624 ID: 0.20 (mm) Dilution Factor: 50.0
 Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)
 Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
79-01-6	Trichloroethene	110	JD
108-87-2	Methylcyclohexane	250	U
78-87-5	1,2-Dichloropropane	250	U
75-27-4	Bromodichloromethane	250	U
10061-01-5	cis-1,3-Dichloropropene	250	U
108-10-1	4-Methyl-2-pentanone	500	U
108-88-3	Toluene	250	U
10061-02-6	trans-1,3-Dichloropropene	250	U
79-00-5	1,1,2-Trichloroethane	250	U
127-18-4	Tetrachloroethene	2100	D
591-78-6	2-Hexanone	500	U
124-48-1	Dibromochloromethane	250	U
106-93-4	1,2-Dibromoethane	250	U
108-90-7	Chlorobenzene	250	U
100-41-4	Ethylbenzene	250	U
95-47-6	o-Xylene	250	U
179601-23-1	m,p-Xylene	250	U
100-42-5	Styrene	250	U
75-25-2	Bromoform	250	U
98-82-8	Isopropylbenzene	250	U
79-34-5	1,1,2,2-Tetrachloroethane	250	U
541-73-1	1,3-Dichlorobenzene	250	U
106-46-7	1,4-Dichlorobenzene	250	U
95-50-1	1,2-Dichlorobenzene	250	U
96-12-8	1,2-Dibromo-3-chloropropane	250	U
120-82-1	1,2,4-Trichlorobenzene	250	U
87-61-6	1,2,3-Trichlorobenzene	250	U

ONLY USE cis-1,2-Dichloroethane! Tetrachloroethene from dilution

1-30-09
KSA

1J - FORM I VOA-TIC
 VOLATILE ORGANICS ANALYSIS DATA SHEET
 TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

H2561DL

Lab Name: A4 SCIENTIFIC, INC. Contract: EPW05036
 Lab Code: A4 Case No.: 38043 Mod. Ref No.: SDG No.: H1YQ0
 Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: 0009799-11RE1
 Sample wt/vol: 5.00 (g/mL) mL Lab File ID: H4804.D
 Level: (TRACE or LOW/MED) LOW Date Received: 12/09/2008
 % Moisture: not dec. Date Analyzed: 12/17/2008
 GC Column: DB-624 ID: 0.20 (mm) Dilution Factor: 50.0
 Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)
 CONCENTRATION UNITS: (ug/L or ug/kg) ug/L Purge Volume: 5.0 (mL)

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01				
02				
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30				
E966796 ¹	Total Alkanes	N/A		

¹EPA-designated Registry Number.

K&A
 30-09

1A - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

H29Q8

Lab Name: A4 SCIENTIFIC, INC. Contract: EPW05036
 Lab Code: A4 Case No.: 38043 Mod. Ref No.: SDG No.: H1YQ0
 Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: 0009799-13
 Sample wt/vol: 5.00 (g/mL) mL Lab File ID: H4787.D
 Level: (TRACE/LOW/MED) LOW Date Received: 12/09/2008
 % Moisture: not dec. Date Analyzed: 12/15/2008
 GC Column: DB-624 ID: 0.20 (mm) Dilution Factor: 1.0
 Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)
 Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
75-71-8	Dichlorodifluoromethane	5.0	U
74-87-3	Chloromethane	5.0	U
75-01-4	Vinyl chloride	5.0	U
74-83-9	Bromomethane	5.0	U
75-00-3	Chloroethane	5.0	U
75-69-4	Trichlorofluoromethane	5.0	U
75-35-4	1,1-Dichloroethene	5.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	5.0	U
67-64-1	Acetone	72	U
75-15-0	Carbon disulfide	5.0	U
79-20-9	Methyl acetate	5.0	U
75-09-2	Methylene chloride	5.0	U
156-60-5	trans-1,2-Dichloroethene	5.0	U
1634-04-4	Methyl tert-butyl ether	5.0	U
75-34-3	1,1-Dichloroethane	5.0	U
156-59-2	cis-1,2-Dichloroethene	5.0	U
78-93-3	2-Butanone	10	U
74-97-5	Bromochloromethane	5.0	U
67-66-3	Chloroform	5.0	U
71-55-6	1,1,1-Trichloroethane	5.0	U
110-82-7	Cyclohexane	5.0	U
56-23-5	Carbon tetrachloride	5.0	U
71-43-2	Benzene	5.0	U
107-06-2	1,2-Dichloroethane	5.0	U
123-91-1	1,4-Dioxane	100	U

Report 1,4-Dioxane for Low-Medium VOA analysis only

VFA
1-30-09

1B - FORM I VOA-2
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

H29Q8

Lab Name: A4 SCIENTIFIC, INC. Contract: EPW05036
 Lab Code: A4 Case No.: 38043 Mod. Ref No.: SDG No.: H1YQ0
 Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: 0009799-13
 Sample wt/vol: 5.00 (g/mL) mL Lab File ID: H4787.D
 Level: (TRACE/LOW/MED) LOW Date Received: 12/09/2008
 % Moisture: not dec. Date Analyzed: 12/15/2008
 GC Column: DB-624 ID: 0.20 (mm) Dilution Factor: 1.0
 Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)
 Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
79-01-6	Trichloroethene	5.0	U
108-87-2	Methylcyclohexane	5.0	U
78-87-5	1,2-Dichloropropane	5.0	U
75-27-4	Bromodichloromethane	5.0	U
10061-01-5	cis-1,3-Dichloropropene	5.0	U
108-10-1	4-Methyl-2-pentanone	10	U
108-88-3	Toluene	13	
10061-02-6	trans-1,3-Dichloropropene	5.0	U
79-00-5	1,1,2-Trichloroethane	5.0	U
127-18-4	Tetrachloroethene	5.0	U
591-78-6	2-Hexanone	10	U
124-48-1	Dibromochloromethane	5.0	U
106-93-4	1,2-Dibromoethane	5.0	U
108-90-7	Chlorobenzene	5.0	U
100-41-4	Ethylbenzene	5.0	U
95-47-6	o-Xylene	5.0	U
179601-23-1	m,p-Xylene	5.0	U
100-42-5	Styrene	5.0	U
75-25-2	Bromoform	5.0	U
98-82-8	Isopropylbenzene	5.0	U
79-34-5	1,1,2,2-Tetrachloroethane	5.0	U
541-73-1	1,3-Dichlorobenzene	5.0	U
106-46-7	1,4-Dichlorobenzene	5.0	U
95-50-1	1,2-Dichlorobenzene	5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	5.0	U
120-82-1	1,2,4-Trichlorobenzene	5.0	U
87-61-6	1,2,3-Trichlorobenzene	5.0	U

1J - FORM I VOA-TIC
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

H29Q8

Lab Name:	A4 SCIENTIFIC, INC.	Contract:	EPW05036			
Lab Code:	A4	Case No.:	38043	Mod. Ref No.:	SDG No.:	H1YQ0
Matrix:	(SOIL/SED/WATER)	WATER	Lab Sample ID:	0009799-13		
Sample wt/vol:	5.00	(g/mL)	mL	Lab File ID:	H4787.D	
Level:	(TRACE or LOW/MED)	LOW	Date Received:	12/09/2008		
% Moisture:	not dec.		Date Analyzed:	12/15/2008		
GC Column:	DB-624	ID:	0.20 (mm)	Dilution Factor:	1.0	
Soil Extract Volume:		(uL)	Soil Aliquot Volume:	(uL)		
CONCENTRATION UNITS: (ug/L or ug/kg)	ug/L	Purge Volume:	5.0	(mL)		

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01 000556-67-2	Cyclotetrasiloxane, octamet.	11.38	53	JN
02 005779-95-3	Benzaldehyde, 3,5-dimethyl-	14.82	6.8	JN
03				
04				
05				
06				
07				
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26				
27				
28				
29				
30				
E966796 ¹	Total Alkanes	N/A		

¹EPA-designated Registry Number.

KSA
1-30-09